PDF version

Manal Badrasawi[1] and Souzan Zidan[1]

[1]Nutrition and Food Technology Department, Faculty of Agriculture and Veterinary Medicine, An-Najah National University, Nablus, Palestine. (Correspondence to: Manal Badrasawi: manalpharmacist@gmail.com).

Abstract

Background: Depressive disorders in elderly people can affect their cognitive and physical abilities and nutritional status.

Aims: This study aimed to determine the prevalence of depressive disorders in older Palestinians and its relationship with nutritional, functional and cognitive status.

Methods: A cross-sectional study was conducted among Palestinians > 60 years living in Hebron, West Bank from September 2017 to March 2018. An interview-based questionnaire was used to obtain information on sociodemographic characteristics, nutritional habits, anthropometric measurements, cognitive function (using the Montreal cognitive assessment tool), and functional status (using activities of daily living and instrumental activities of daily living scales). The presence of depressive symptoms was determined using the geriatric depression scale: a score ≥ 5 indicated depressive symptoms.

Results: A total of 291 participants were included in the study. Mean age was 70.4 (SD 7.0) years, range 60–100. The prevalence of depressive symptoms was 51.9%. Depression was significantly associated with marital status (being single), low educational and income level, unemployment, and inability to write and make calculations. The presence of depressive disorders was also significantly associated with lower scores on the instrumental activities of daily living scale and the Montreal cognitive assessment tool, and with hypercholesterolaemia, chewing and swallowing difficulties and lack of appetite.

Conclusion: A considerable percentage of older Palestinian adults had depressive symptoms. There is a need to screen and treat depressive symptoms among older Palestinian adults to prevent their progression to severe mental health problems.

Keywords: depression, aged, prevalence, nutritional status, functional status, cognition, Palestine.

Citation: Badrasawi M; Zidan S. Prevalence and correlates of depressive symptoms in older people in the West Bank, Palestine: cross-sectional study. East Mediterr Health J. 2021;27(3):260-268. https://doi.org/10.26719/2021.27.3.260

Received: 28/11/19; accepted: 15/03/20

Introduction

Depression affects 7% of the general elderly population (1). The development of depression in older adults may be attributable to a reduction in mental, cognitive and physical abilities, increased probability of death among their friends or loved ones, retirement and loss of communication with people. Symptoms including fatigue, anxiety, insomnia, feelings of hopelessness, permanent sadness, anxiety, low energy, aches and pains, and suicidal thoughts may all be signals of depression in later age (2).

Although depression is the most widespread psychiatric disorder among elderly people, it is usually misdiagnosed and undertreated (3). This could be as a result of the misconception that depression is part of the ageing process rather than a treatable disorder. Depression increases dependence on others and reduces an individual's quality of life. If depression is left untreated, there will be considerable social and clinical effects on the lives of elderly people (4).

Diagnosis of depression in older people is often difficult. The elderly person and his/her family members may deny the possibility of depression and if he/she has cognitive impairment, eliciting a history may be complicated. Signs and symptoms of depression among elderly individuals are also distinct from depression in other periods of adulthood. The elderly often present with somatic or non-specific symptoms rather than the typical symptoms of depression, such as low energy, fatigue, reduction in physical movements and cognitive deficits (5).

Studies have assessed the link between depression and body weight. However, the findings differ: some studies have reported a positive association (6), some a negative association (7) and some have found no association (8). These findings indicate that not all individuals who are overweight or obese have psychological problems such as depression and there could be specific factors predisposing certain people to depression. For example, sociodemographic factors are possible mediators and moderators of the association between body weight and depression which may explain the inconsistent results.

In the past two decades, life expectancy at birth in Palestine has increased considerably, which has led to an increase in the elderly population. The number of older adults aged more than 60 years in mid-2019 was 257 151 (5% of the population): 169 503 people (6%) in the West Bank and 87 648 (4%) in Gaza Strip (9). This proportion of elderly people in the population is expected to grow even more in the next decade (9).

To our knowledge, no research has been done on depressive disorders in elderly Palestinians. Therefore, the main aim of our study was to screen older Palestinian adults for depressive disorders and to assess the associated risk factors, including nutritional, functional and cognitive status.

Methods

Study design, setting and sample

This was a cross-sectional study of elderly people in Hebron, West Bank. Hebron district consists of the main city of Hebron, two refugee camps and a large number of villages. We randomly selected one camp, two villages – one from the south and one from the north – and three different areas in the city to represent the study population.

We used G power software, version 3.1.9.7 to calculate the sample size based on the percentage of older adults in Palestine (6%), a 5% margin of error and 95% confidence level. The sample size calculated was 280 participants, and assuming a 5% drop-out, the required

sample size was 294 participants. We used purposive sampling to select participants. Inclusion criteria were individuals aged 60 years or more who lived in the selected areas and agreed to take part in the study. Exclusion criteria were the presence of acute illness on the day of data collection (as reported by the potential participant) and severe hearing problems that prevented communication with the research team.

After we had selected the areas, the research team contacted the local committee for each place and they helped us to approach the older adults. The committee differed from place to place, for example, for the camps, it was a committee of the refugee affairs department, and for villages, it was the village municipality. The response rate was 94% (very few people did not agree to participate)

Data collection

Our data collection team was composed of five nutritionists trained to take anthropometric measurements and assess body composition, and to do physical function tests. The team collected data from September 2017 to March 2018. It was difficult to collect data from older adults during the winter when the weather was very cold (December–February) so we stopped the data collection if the weather was very cold. In addition, because of the large amount of data collected, we could only assess about 5–7 participants a day. They briefed the participants on the purpose of the study and gave them an information sheet with details about the study. They then interviewed the participants in order to complete the questionnaires.

Instruments

We used a questionnaire to collect data on sociodemographic characteristics, medical history and dietary habits. Items on sociodemographic data included: sex, marital status, educational level, monthly income, working status and living status (living alone or with their family). For medical history, we asked about the self-reported presence of 15 chronic diseases (hypertension, hypercholesterolaemia, diabetes, stroke, osteoarthritis, heart disease, glaucoma, renal disease, asthma, chronic obstructive pulmonary disease, gout, hip fracture, constipation, gastric ulcer and cancer), and on previous surgery, if any (number of surgical operations, types and dates). In addition, the questionnaire included questions on history of falls, how many and where, and if the fall resulted in hospital admission for a fracture. We also asked about smoking status. Dietary habits were self-reported by the participants. Questions included total number of meals a day, main meals and snacks per day, and the time of the last meal and first meal of the day to estimate the period of overnight fasting.

We also assessed nutritional status, mental health, cognitive function and physical function status.

To assess nutritional status, we used the mini nutritional assessment tool which is a reliable, feasible and non-invasive screening test for evaluating of nutritional status in elderly people (10). This questionnaire has 18 different questions, such as experiencing psychological stress or acute disease in the past 3 months, weight loss in the past 3 months, and amount of fluids (e.g. water, juice, coffee, tea and milk) drunk a day. We then classified the participants into three categories: malnutrition (score

We also assessed nutritional status from anthropometric measurements and dietary habits. The data collection team took weight, height and mid-upper arm circumference measurements according to standard anthropometric procedures (12). We calculated body mass index – weight in kilograms divided by height in metres squared (kg/m2). We measured the mid upper arm circumference on the right arm using a measuring tape. We defined muscle wasting as mid upper arm circumference